

20000816.qrp v01_n915.qrl.20000816

Date: Wed, 16 Aug 2000 19:03:06 EDT

From: qrp-l@Lehigh.EDU

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: QRP-L digest 1915

QRP-L Digest 1915

Topics covered in this issue include:

- 1) [77454] Flavorig
by "Brian Olson" <brolson@ties.k12.mn.us>
- 2) [77455] Re: Engineering Problem
by "Cla KA0GKC" <ka0gkc@arrl.net>
- 3) [77456] tap tap
by Anthony Felino <anthony@pacinfosb.com>
- 4) [77457] Re: tap tap
by Bob W7AVK <rsrolfne@atnet.net>
- 5) [77458] Re: Flavorig
by "Karl F. Larsen" <k5di@zianet.com>
- 6) [77459] Yahoo !!!!!140 confirmed !!!!!
by "George Osier" <gosier@twcny.rr.com>
- 7) [77460] More Engineer thoughts
by "Karl F. Larsen" <k5di@zianet.com>
- 8) [77461] RE:FS Poqet equipment
by John Payne <paynej1@strato.net>
- 9) [77462] Want: DSW-40
by Paul Womble <pwomble1@tampabay.rr.com>
- 10) [77463] Re: More Engineer thoughts
by "George , W5YR" <w5yr@att.net>
- 11) [77464] Heatsinking 101 Was Re: Engineering Problem
by "Robert P. Okas" <vintage@best.com>
- 12) [77465] Sub down
by Pete Burbank <plburbank@kih.net>
- 13) [77466] Re: DITTER FOUND!!!!
by Nv4t@aol.com
- 14) [77467] SMK-1 availability
by Bill Walker <windal@azstarnet.com>
- 15) [77468] Re: FET-1 Transceiver
by Nv4t@aol.com
- 16) [77469] Cripple Fox Report
by ARDUJENSKI@aol.com
- 17) [77470] Re: FET-1 Transceiver
by "Paul Harden, NA5N" <na5n@rt66.com>
- 18) [77471] Solar reports
by "Paul Harden, NA5N" <na5n@rt66.com>
- 19) [77472] Engineering Problem

- by David Sarraf <david.sarraf@paonline.com>
- 20) [77473] Re: SD20 Parts...
by George Gingell <k3tks@u1.abs.net>
- 21) [77474] Re: SW40
by JP <jdanter@mail.i-america.net>
- 22) [77475] Toroid Question
by Tom and Roxy <zikot@erie.net>
- 23) [77476] Now That Is What This List Is All About
by John R Kirby <n3aaz-qrp@juno.com>
- 24) [77477] Re: idea for simple 15M rig
by S LYON <sslyon@worldnet.att.net>
- 25) [77478] Re: More Engineer thoughts
by DONALD DORN <DDORN@CWIS.NET>
- 26) [77479] Heatsinking 101
by wgabriel@dukeengineering.com
- 27) [77480] OPS: Message Relay Exercise?
by ARDUJENSKI@aol.com
- 28) [77481] Re: Heatsinking 101 garbled...
by "Mont Pierce" <MyGrapeVine@yahoo.com>
- 29) [77482] Re: SD20 Parts...(and more)
by david gauding <nf0r@slacc.com>
- 30) [77483] EMTECH alignment question
by Ed Lawson <elawson@lawson-philpot.com>
- 31) [77484] Re: Toroid Question
by "Paul Harden, NA5N" <na5n@rt66.com>
- 32) [77485] For Sale
by "Bill Wetherill" <n2wg@wilmington.net>
- 33) [77486] K0EVZ FOX Log (final)
by "Wilford D. Lindsey" <70511.3041@compuserve.com>
- 34) [77487] Re: More Engineer thoughts
by Charlie Panek <charlie_panek@agilent.com>
- 35) [77488] MFJ 8100 Regen
by "Bruce Kizerian" <kizerian@ced.utah.edu>
- 36) [77489] Solar Cell Arrays
by "Bruce Kizerian" <kizerian@ced.utah.edu>
- 37) [77490] VIRUS Warning!! (fwd)
by Bob Patten <n4bp@bc.seflin.org>
- 38) [77491] Antenna - Ok, time to do something.
by Macstein@aol.com
- 39) [77492] Re: Antenna - Ok, time to do something.
by "Brian" <brian@iquest.net>
- 40) [77493] Re: Antenna - Ok, time to do something.
by David Hinerman <dlh1009@ritvax.isc.rit.edu>
- 41) [77494] No cats heard today.
by Michael Neverdosky <mneverdosky@earthlink.net>
- 42) [77495] cheep power supplies
by David Hinerman <dlh1009@ritvax.isc.rit.edu>
- 43) [77496] Re: Toroid Question

by Charlie Panek <charlie_pane@agilent.com>
44) [77497] Re: Antenna - Ok, time to do something.
by "Mike Yetsko" <myetsko@insydesw.com>
45) [77498] Re: Antenna - Ok, time to do something.
by "Mike Yetsko" <myetsko@insydesw.com>
46) [77499] RE: VIRUS Warning!! (fwd)
by "John L. Sielke" <w2agn@pobox.com>
47) [77500] Re: SD20 Parts...
by "Geoff QRP-L mailing list" <geoffqrp@wormhole2.com>
48) [77501] OT-CD_ROM "help"
by David Shalita <af389@lafn.org>
49) [77502] QRPers Internet Surfing Guide(Short)
by Doug Bankston <dougbankston1@yahoo.com>
50) [77503] Output QRP
by "Tom Dufresne" <tdufres@hotmail.com>
51) [77504] CW filter for Yaesu FT-7?
by Quinn Farnes <quinn_farnes@yahoo.com>
52) [77505] Re: CW filter for Yaesu FT-7?
by "C. M. Martin" <caitlyn@netferrets.net>
53) [77506] Re: Heatsinking 101 Was Re: Engineering Problem
by "Karl F. Larsen" <k5di@zianet.com>
54) [77507] Re: SMK-1 availability
by "Jay Bromley" <w5jay@alltel.net>
55) [77508] Re. Toroid question
by "Donny Sirait" <dsirait@centrin.net.id>
56) [77509] Re: Antenna - Ok, time to do something.
by Dean W Manley <kh6b@juno.com>
57) [77510] RE: CW filter for Yaesu FT-7?
by "Kanalz, Karl" <Karl.Kanalz@allegiancetelecom.com>
58) [77511] Re: Hull tapping 101
by KF4YYD@aol.com
59) [77512] Re: Antenna - Ok, time to do something.
by "Bob Tellefsen" <n6wg@earthlink.net>
60) [77513] Re: Re. Toroid question
by "Bob Tellefsen" <n6wg@earthlink.net>
61) [77514] NEQRP CW Net Thursday 9:00 PM EDT, 3561 MHz
by "C. J. Ludinsky" <cjl@mitre.org>
62) [77515] edu: emergency CW tapping...
by "Tom Scott" <TomRScott@Sterlink.net>
63) [77516] Re: Heatsinking 101 Was Re: Engineering Problem
by "Russ Hines" <radioruss@fuse.net>

Date: Tue, 15 Aug 2000 18:39:20 -0500
From: "Brian Olson" <brolson@ties.k12.mn.us>
To: <qrp-l@Lehigh.EDU>
Subject: [77454] Flavorig

Message-ID: <NDBBJPBMGLKJGANKJAEJMEPMDAAA.brolson@ties.k12.mn.us>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Went against most popular advise from the list and built the Flavorig. This is a 80-meter CW transceiver from a radio shack am transistor radio. Receive section is working at 3.937 to 4.040. I need to drop that down to 3.695. Would rather not mess with toroid(I think adding one or two turns would do it) it's tight in there and difficult to get out. There is a 220pf cap that I thought could change to 100pf to lower frequency this parallels tuning trimmer cap. Could use some advise (this time I'll listen). I want to try the transmit section as soon as I get on lower frequency. This project has been quite the learning experience. Thank you for any help.

Brian R. Olson
N0XFE
Bloomington, MN

Date: Tue, 15 Aug 2000 18:24:21 -0500
From: "Cla KA0GKC" <ka0gkc@arrl.net>
To: <k5di@zianet.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [77455] Re: Engineering Problem
Message-ID: <004301c00710\$0b6c6c20\$0200000a@mcg.net>

From: "Karl F. Larsen" <k5di@zianet.com>

| The Ten Tec Argonaut has a 2" by 2" aluminum plate as the heat
| sink for 2 T0-50 transisters.

I'm not an EE either, but I'm sure to calculate the heat flow the thickness of the aluminum plate would need to be known. My best guess would be to add one or two similar sized plates bent such that they provide additional fins, or simply buy an appropriate pair of modern heatsinks.

The best method is probably to get the transistors mounted, key down and measure how quickly the temperature rises to a "hot" level. (I use my finger!) Also, if the amp is about 60% efficient the heat sinks will need to dissipate about 7 watts when driven for 10 watts output, not 17. I could be wrong though. Also, unless you intend to use the rig for PSK31 or something that will key it down for long periods, you can cut the heatsink dissipation down about 70% and still be good to go. (Just don't leave a brick on the key.)

Hope this Helps,

73 de KA0GKC Claton Cadmus
ka0gkc@arrl.net

Date: Tue, 15 Aug 2000 16:21:32 -0800
From: Anthony Felino <anthony@pacinfosb.com>
To: n7kt@worldnet.att.net, qrp-1@lehigh.edu
Subject: [77456] tap tap
Message-ID: <Chameleon.966382030.anthony@anthony-400>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; CHARSET=ISO-8859-1

"Find a ham or railroad buff who has a sounder, and use the key. Listen to the spaces between the clicks"

The difference is that a telegraph sounder makes a distinct sound for make and break, so it is easy to determine the length of a key closure with just a little practice. Not so for tapping a hull with a wrench. You would have a hard time telling an A from an I.

There is a tap code that uses only "dots". It's in "Morse Code: the essential language" by ARRL

73, WN6Q

Anthony Felino, Pacific Information Design
email: anthony@pacinfosb.com
telephone: (805) 730 1565, x25

Date: Tue, 15 Aug 2000 16:44:34 -0700
From: Bob W7AVK <rsrolfne@atnet.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [77457] Re: tap tap
Message-ID: <3999D5E2.C35B796@atnet.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Group - Doesn't have to be morse. In POW camps the tapping code was based on a box in which the letters were placed. Then the row and column of each letter was sent as a number of taps. So each letter had two number of taps. Simple and anyone could send or read it.

73 Bob W7AVK

Anthony Felino wrote:

```
> "Find a ham or railroad buff who has a sounder, and use the key. Listen
> to the spaces between the clicks"
>
> The difference is that a telegraph sounder makes a distinct sound for make
> and break, so it is easy to determine the length of a key closure with just
> a little practice. Not so for tapping a hull with a wrench. You would have a
> hard time telling an A from an I.
>
> There is a tap code that uses only "dots". It's in "Morse Code: the essential
> language" by ARRL
>
> 73, WN6Q
> -----
> Anthony Felino, Pacific Information Design
> email: anthony@pacinfosb.com
> telephone: (805) 730 1565, x25
> -----
```

```
-----
Date: Tue, 15 Aug 2000 17:59:02 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: Brian Olson <brolson@ties.k12.mn.us>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [77458] Re: Flavorig
Message-ID: <Pine.LNX.4.10.10008151757130.1465-1000000@cannac.ampr.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII
```

Hi Brian, you need to ADD capacitance to lower the Frequency. I would guess that a 50 pf cap across the 220 pf will do it, maybe too much....

On Tue, 15 Aug 2000, Brian Olson wrote:

```
> Went against most popular advise from the list and built the Flavorig. This
> is a 80-meter CW transceiver from a radio shack am transistor radio.
```

> Receive section is working at 3.937 to 4.040. I need to drop that down to
> 3.695. Would rather not mess with toroid(I think adding one or two turns
> would do it) it's tight in there and difficult to get out. There is a 220pf
> cap that I thought could change to 100pf to lower frequency this parallels
> tuning trimmer cap. Could use some advise (this time I'll listen). I want
> to try the transmit section as soon as I get on lower frequency.
> This project has been quite the learning experience. Thank you for any
> help.
>
> Brian R. Olson
> N0XFE
> Bloomington, MN
>
>
>
>

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

Date: Tue, 15 Aug 2000 21:36:39 -0400
From: "George Osier" <gosier@twcny.rr.com>
To: <qrp-l@lehigh.EDU>
Subject: [77459] Yahoo !!!!!140 confirmed !!!!!
Message-ID: <000301c00722\$6d068440\$c548a918@compaq.twcny.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello All !!!!!

Happy day !!! Just received a card from VK5AZ for number 140 QRP today
!!!! Cant wait for the Fall contest season !!!!!working toward
200 (I hope) Thanks to Bob , VK5AZ for picking out my weak signal
on 20 meters !!!!!

73s

George , N2JNZ/QRP

Date: Tue, 15 Aug 2000 19:45:10 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: QRP-L List <qrp-l@lehigh.edu>
Subject: [77460] More Engineer thoughts
Message-ID: <Pine.LNX.4.10.10008151926120.1674-100000@cannac.ampr.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

First thanks for the 2 messages with help so far. Alas there is just zero new room in the Argonaut. The filter board is 1 1/2" from the amplifier board. That's all the room there is without doing something mechanical and hard.

I was thinking and looked at the amplifier circuit and thanks to Ten Tec I have details of every component. I decided to see how hard it might be to make the amplifier single ended. It turns out this is not hard at all. Might want to remove a couple of resistors in the push-pull transformers and by not hooking up the second xister you do make it single ended. According to the data sheet, if we can get .25 watts of drive to the transistor, and have 12 vdc we get typically 7.5 watts of RF and the transistor is 60% efficient.

This means just 1 xister to cool and I will calculate the heat dissipated correctly this time...:-(We get 7.5 watts output with 60% eff and that means that $40/60 = 7.5/x$ or $x = 7.5 (60/40) = 11.25$ Watts of heat to dissipate. This may still be a problem but there are more options with just 1 transistor.

So what do the designers in this group think of this idea?

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

Date: Tue, 15 Aug 2000 21:45:09 -0400
From: John Payne <paynej1@strato.net>
To: qrp-l@lehigh.edu
Subject: [77461] RE:FS Poqet equipment
Message-ID: <SAK.2000.08.15.hetobmbq@john-payne>
MIME-Version: 1.0
Content-Type: Text/Plain; charset=ISO-8859-1
Content-Transfer-Encoding: 8Bit

Does anyone know the EMail or URL address for Bryan Mason, who

has the Poqet goodies?

Many thanks, John N4FLJ

Date: Tue, 15 Aug 2000 21:55:27 -0400
From: Paul Womble <pwomble1@tampabay.rr.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [77462] Want: DSW-40
Message-ID: <3999F48F.4FD92F52@tampabay.rr.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Looking for a DSW-40. Prefer unbuilt...but if you have one working let me know.

Will trade NC20 (lots of mods done...great radio) or will buy.

Who's interested?

Thanks
Paul AJ4Y

Date: Tue, 15 Aug 2000 20:52:28 -0500
From: "George , W5YR" <w5yr@att.net>
To: k5di@zianet.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [77463] Re: More Engineer thoughts
Message-ID: <3999F3DC.8C7B2467@att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I think that I would consider using a simple little fan and not rebuild the circuit.

Your figures indicate that for 17 watts d-c input you should expect to get 10 watts r-f output and 7 watts of heat. Surely a very small fan can remove that rate of heat with little complication to the radio. Those made for CPU-chip cooling should fit right in on the case back or top.

Good luck.

72/73, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE Dallas in Collin county QRP-L 1373
Amateur Radio W5YR, in the 54th year and it just keeps getting better!
R/C since 1964 - AMA 98452 RVing since 1972 Kachina #91900556
(12/99)

"Karl F. Larsen" wrote:

>

> So what do the designers in this group think of this idea?

Date: Tue, 15 Aug 2000 19:23:36 -0700 (PDT)
From: "Robert P. Okas" <vintage@best.com>
To: "Karl F. Larsen" <k5di@zianet.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [77464] Heatsinking 101 Was Re: Engineering Problem
Message-ID: <Pine.BSF.4.21.0008151901100.653-100000@shell114.ba.best.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Karl,

If you're interested in an engineering solution, you need to determine the thermal resistance of that 4 sq. in. hunk of aluminum. To do this, you'll need a reasonably accurate way to measure temperature. An indoor/outdoor digital thermometer, like that available from Radio Shack, should be good enough. Use the remote outdoor sensor. You will also need a calibrated heat source. An 8 Ohm resistor connected to a 12V supply dissipates 18 watts.

Thermally bond the resistor to the chassis. You'll need the silicone grease to do this adequately. Attach the thermometer's sensing element in a like manner. Note the starting temperature. Apply power to the resistor and let the temperature stabilize. This should take only a couple of minutes due to the low thermal mass of the plate. Note the new temperature.

You can calculate the heatsink's thermal resistance by:

$$R = \frac{T(\text{hot}) - T(\text{cool})}{\text{Power In}}$$

The thermal resistance is in units of degrees/watt. Celsius is customary temperature scale. Once you know the thermal resistance, you can predict the heatsink's temperature rise for a given power dissipation using the following equation:

$$T_{rise} = R * P_{diss}$$

Where: R = Thermal resistance
P_{diss} = device power dissipation.

The power transistors you plan on using also have some thermal resistance from the junction to the mounting tab. This value gets added to the heatsink's thermal resistance.

In very general terms, most bipolar power transistors can survive a junction temperature of 100 degrees C, but their lives will be shortened. Stay within the published SOA (Safe Operating Area) for long device life. The cooler the junction, the happier the transistor! ;-} ;-}

I hope you all find this helpful

73,
Bob - W3CD

On Tue, 15 Aug 2000, Karl F. Larsen wrote:

>
> As an EE I am qualified to build a class B push-pull amplifier but
> not to estimate heat flow and the temperature rise over time. So I'm
> asking for some help in this area.
>

Date: Tue, 15 Aug 2000 22:35:46 -0400
From: Pete Burbank <plburbank@kih.net>
To: <qrp-1@Lehigh.EDU>
Subject: [77465] Sub down
Message-ID: <3.0.32.20000815223542.0068ba3c@kih.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Too bad we can't talk about this...

Well I can and will...dammit.

Free ascent is possible from 400 feet down ...Dr.Stienke proved that...483 feet if memory serves me right.
The record for an up and down trip is 511 feet from a S. American man in great physical shape.
To stifle any discussion on this topic is ..????
Yes a person would have to be picked up immediately to avoid hypothermia.
Golly Ned!!! Let's talk about QRP
Pete NV4V Angry in KY

Date: Tue, 15 Aug 2000 22:32:10 EDT
From: Nv4t@aol.com
To: brian@iquest.net, qrp-1@lehigh.edu
Subject: [77466] Re: DITTER FOUND!!!!
Message-ID: <65.879047d.26cb572a@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

B0000000!!!!!!!

Date: Tue, 15 Aug 2000 19:28:43 -0700
From: Bill Walker <windal@azstarnet.com>
To: qrp-1@Lehigh.EDU
Subject: [77467] SMK-1 availability
Message-ID: <00081519344200.02374@deneb>
Content-Type: text/plain
MIME-Version: 1.0
Content-Transfer-Encoding: 8bit

Please help!

Could anyone tell me if the NorCal SMK-1 kits are available?
I've already sent two emails to Doug Hendricks but have received no response.
Is there someone else that I should contact?
I would like to order one of these kits but I want to make sure that they are available first.

Thanks...

--
Bill Walker - KD7JZB

windal@azstarnet.com
<http://www.azstarnet.com/~windal/>

Date: Tue, 15 Aug 2000 22:36:57 EDT
From: Nv4t@aol.com
To: zikot@erie.net, qrp-1@lehigh.edu
Subject: [77468] Re: FET-1 Transceiver
Message-ID: <f2.1d797f2.26cb5849@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

In a message dated 8/15/00 5:42:30 PM Central Daylight Time, zikot@erie.net writes:

<< <http://www.qsl.net/vqs/w2uw.htm>
>>

Tom , think I'll bite for it and try it myself

72, Bill NV4T, former K3DDX of Erie fame?????

Date: Tue, 15 Aug 2000 22:56:20 EDT
From: ARDUJENSKI@aol.com
To: qrp-1@lehigh.edu, wptodd@techline.com
Subject: [77469] Cripple Fox Report
Message-ID: <46.95b03e7.26cb5cd4@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Well not too bad for the first nite:

40m 0020 579/579 AB EARL VA6RF
40m 0100 599/579 OR DAN KK7GR

20m 0138 559/599 FL DICK K3NWD
20m 0150 339/599 MN DICK KCQDJQ (300mw)
20m 0159 549/459 KS RANDY KC0CCR

Band a little ruff so hope I didn't miss any of you folks.

QRP+
5W
Gap Titan

1/2 wave 20m vertical

See ya next week
Gimpy the Fox---KB7MBI

Date: Tue, 15 Aug 2000 22:23:16 -0600 (MDT)
From: "Paul Harden, NA5N" <na5n@rt66.com>
To: Tom and Roxy <zikot@erie.net>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [77470] Re: FET-1 Transceiver
Message-ID: <Pine.SUN.4.10.10008152218510.25609-1000000@shell.rt66.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Tue, 15 Aug 2000, Tom and Roxy wrote:
> Has anyone built a the FET-1 40m Xcvr that was designed by Glenn Yingling,
> W2UW? Did it actually work? The URL for the schematic and construction notes
> is at: <http://www.qsl.net/vqs/w2uw.htm>

Just went and looked at it. Kind of a clever, simple circuit, and certainly looks workable to me. Seems it would be a neat little rig to build up Manhattan Style.

One thought I had was to replace the 4PDT switch (for xmt/rcv) with a couple of 4066 or similar analog switches, driven directly off the key line, for full QSK and save flipping the switch. The low series resistance added by doing that shouldn't effect the circuit.

BTW, the circuit *does* look better once you print it out -hi. Nice circuit by Glenn. Let us know if you build it and what you think.

72, Paul NA5N

Date: Tue, 15 Aug 2000 22:18:19 -0600 (MDT)
From: "Paul Harden, NA5N" <na5n@rt66.com>
To: qrp-canada@lists.gpfn.sk.ca, qrp-l@lehigh.edu
Subject: [77471] Solar reports
Message-ID: <Pine.SUN.4.10.10008152159420.25609-1000000@shell.rt66.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Gang,

I post the daily RSGA with comments and my tutorials to QRP-L and to QRP-CANADA. I often get asked if I could send them to individuals, like those on digest who get them a day late, or those who are not QRPers (and don't want to be caught dead subscribing to a QRP list, I guess!). I have avoided this as I'm afraid it would mushroom into an unmanageable distribution list, nor do I have the time to maintain a website for this.

I am pleased to announce that thanks to the efforts of Ken Pulfer, VE3PU, they are now available on the Canadian RAC website in the open area (not the members-only pages) at www.rac.ca/snews.htm or, if you have them bookmarked already, www.rac.ca click on "News and Chat" and scroll down to "More News." This will be an echo of the pertinent posts made to qrp-l and the latest posted will appear there. They will not be archived, since most of my comments are based on current activity, and thus will be fairly meaningless only a few days later.

And for those of you who haven't visited the Canadian version of the ARRL, I suggest you visit it. A very nice website, plenty of good information. Might even consider joining them now :-)

In the near future, I am planning on writing an "e-book" containing descriptions of all this solar activity, how to read and interpret all the websites, etc. and will post the "chapters" to qrp-l, qrp-canada, www.RAC.ca, etc. In the meantime, I will try to describe all the activity and "buzz words" on my periodic posts when something happens.

Thanks again Ken and RAC for making this more available. Now don't read anything into this ... I will always continue posting it first to qrp-l and qrp-canada.

72, Paul NA5N

Date: Wed, 16 Aug 2000 01:19:33 -0400
From: David Sarraf <david.sarraf@paonline.com>
To: "Karl F. Larsen" <k5di@zianet.com>
Cc: QRP-L List <qrp-l@lehigh.edu>
Subject: [77472] Engineering Problem
Message-ID: <399A2465.3D6B1D16@paonline.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

>As an EE I am qualified to build a class B push-pull amplifier but
>not to estimate heat flow and the temperature rise over time. So I'm
>asking for some help in this area.

Karl:

I agree it doesn't sound good. 17 watts is not real easy to get rid of with just a plain old metal plate. About the only way it would work is a duty cycle game. CW has a low duty cycle so the plate never gets real hot. Just don't put a book on the key while you fool with a transmatch!

I'm an EE but do thermal management for a living. Send me a sketch of what this looks like and I'd be glad to size a heat sink for you.

Dave Sarraf

Date: Wed, 16 Aug 2000 04:20:43 -0400 (EDT)
From: George Gingell <k3tks@u1.abs.net>
To: QRP List <qrp-l@Lehigh.EDU>
Cc: n0tu@webaccess.net
Subject: [77473] Re: SD20 Parts...
Message-ID: <Pine.BSF.4.21.0008160357001.82840-1000000@u1.abs.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Steve,

Sorry to hear the poles busted. My first thought would be to reinforce the lower end of the poles with something like a wooden dowel and/or silicon Caulking. One thought is to Put a Blocking Plug inside the Metal Antenna Mast or conduit, Add a small Rubber ball or about an inch or so of Silicon caulk to rest the bottom end of the SD-20/Black Widow on. This is also assuming that the SD-20 is going inside of the mast rather than outside.

I would also Fill about 6 to 12 inches of the bottom section with silicon Caulk. Ever try to make a beverage tower from Vegetable tin cans soldered together? They are much stronger if Filled with Sand. Holes for the coax are punched in the closed end of the can with a leather punch and hammer on a block of wood. thread the coax thru all of the cans, fill them up as you go and solder as you go. Of course you clean the joints and applu Plumbers flux before assembly. :^)

It might also be worth considering adding a reinforcing "Sleeve" of PVC Pipe over the Joint. You can cut a few (4) 2 " SLOTS ON EACH END OF THE

PVC and install the hose clamps over them.

Now, I am curious about the FEED. What was it? and was it inside or out?

Always interested in Antenna ideas and support structures.

I wish you could have seen the look on my Grandson's face when I pulled out "The Black Widow" to use for it's original Purpose. Crappie Fishing.

He wanted to know why I had all that wire wound around the bottom. :^)

Why, Stevie that is just in case the Fish Ain't Biteing :^)

Anyway, keep us posted on how you make out. It would be nice to find a source of Replacements. I was also thinking that I might find some fiber glass pole blanks and replace the top section with something a bit more sturdy.

It sure would be great if we could find some 60' "Black Widows" about 2" or so at the bottom end. Maybe something that would slip inside a Corner Post on the Chain link Fence? I guess thay call them "Flag Poles"

Sir George, The First :^)

72 ES

QRP DX TU (C) 1986, G. "Danny" Gingell, K3TKS@ abs.net

QRP A.R.C.I. Net Manager and Board of Director Member.

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George D. Gingell, Jr. 3052 Fairland Road, Silver Spring, MD 20904-7117

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Maryland Milliwatt Club Founder and Trustee of Club Station - WQ3RP -

Grid Square FM19mb 76.94 W - 39.06 N Silver Spring, MD 20904 QRPea.A.

Date: Wed, 16 Aug 2000 06:37:01 -0400

From: JP <jdanter@mail.i-america.net>

To: qrp-l@Lehigh.EDU

Subject: [77474] Re: SW40

Message-ID: <399A6ECD.739B53A7@mail.i-america.net>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

SW40+

Stock Output is 2SC2078=NTE 235

pwr out=5w,50mhz, T0 220 pkg,collector max amps-3 pulse,
collector-base volts 65, collector-emitter volts 65,
emitter-base volts 4, forward gain 80 typical,
max collector power dissipation 12 watts, freq 300mhz

Substitute?

NTE 236

pwr out=16w,27mhz,B26 pkg,collector max amps-6,
collector-base volts 60, collector-emitter volts 25,
emitter-base volts 5, forward gain 50 typical,
max collector power dissipation 20 watts,
typical freq-not speced

B26 pkg is similar to T0220 pkg

Maybe DB will comment on the 2SC2078,
and possible substitutions for mo' pwr output???

KF4VOP

Jamie Danter

Date: Wed, 16 Aug 2000 06:46:27 -0400
From: Tom and Roxy <zikot@erie.net>
To: qrp-l@Lehigh.EDU
Subject: [77475] Toroid Question
Message-ID: <3.0.5.32.20000816064627.007de100@erie.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I am going to try my hand at building the FET-1 40m QRP xcvr that I sent info on to the group yesterday. I was going through my parts and I found that I have a bunch of Toroid's but I don't have a clue as to which one, if any, is a T50-2. Does anyone know what the diameter of a T50-2 would be, OD in inches or Centimeters? If someone could measure one for me I would be very grateful. If memory serves me correctly a T50-2 is a very small Toroid, about the size of a nickle or dime in diameter. If I can get the FET-1 built this Saturday I will post the results to QRP-L in case someone else would like to give this simple xcvr a try.

73's es gud DX!

Tom & Roxanne
WA1VAI/3

Date: Wed, 16 Aug 2000 06:58:37 -0400
From: John R Kirby <n3aaz-qrp@juno.com>
To: vintage@best.com, qrp-l@Lehigh.EDU
Subject: [77476] Now That Is What This List Is All About
Message-ID: <20000816.070004.-69615.0.n3aaz-qrp@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

A "Cook Book" solution to a problem . . .

Re: Heatsinking 101 Was Re: Engineering Problem

> I hope you all find this helpful
>
>73,
>Bob - W3CD
>

Yes I did and Bob,
I wouldn't be surprise to see this published in one of the "classics"
a BIG Thank You . . .

John
N3AAZ
FM19xa

. . . W3CD . . .
>From: "Robert P. Okas" <vintage@best.com>
>To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
>Date: Tue, 15 Aug 2000 19:23:36 -0700 (PDT)
>Subject: Heatsinking 101 Was Re: Engineering Problem
-ar-

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<http://dl.www.juno.com/get/tagj>.

Date: Wed, 16 Aug 2000 07:02:44 -0400
From: S LYON <sslyon@worldnet.att.net>

To: kd1jv@moose.ncia.net
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [77477] Re: idea for simple 15M rig
Message-ID: <399A74D4.703A4E41@worldnet.att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Really good idea, Steve, and 15m is an excellent band in terms of hot antennas in small spaces netting real DX for QRP'ers. I'm all ears.

73

-s-

Steven Weber wrote:

>

> It occurred to me last night that a simple VXO transmitter/ DC
> receiver could be made with one or two of the 7.040 Mhz xtals NorCal,

>

--

'Seab' Lyon - AA1MY

Beacon NY USA FN-31

QRP-L 574 ARCI 9253

Date: Wed, 16 Aug 2000 06:23:19 -0500
From: DONALD DORN <DDORN@CWIS.NET>
To: k5di@zianet.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [77478] Re: More Engineer thoughts
Message-ID: <399A79A7.926E358@CWIS.NET>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Keep after that critter, Karl. The heat sink would not have to dissipate 11.25 watts. It would be five watts, which is the difference between the total input power and that power which is delivered to the load. If the amp is 60% efficient and is delivering 7.5 watts to a load that means its total input must be 12.5 watts, which in turn, means that 40% of the 12.5 watts is causing the heat. The sixty percent figure is not always achieved but the actual efficiency is easily determined with a couple of measurements.

At the cw duty cycle the heat sink you describe would probably work just fine.

Good luck with the project es 73,

Don K5AAR
Lake Eufaula, Ok

>> This means just 1 xister to cool and I will calculate the heat
>>dissapated correctly this time...-(We get 7.5 watts output with 60% >>eff
>>and that means that $40/60 = 7.5/x$ or $x = 7.5 (60/40) = 11.25$ Watts of >>heat
>>to dissapate. This may still be a problem but there are more options >>with
>>just 1 transistor.

Date: Wed, 16 Aug 2000 08:32:36 -0400
From: wgabriel@dukeengineering.com
To: qrp-1@Lehigh.EDU
Subject: [77479] Heatsinking 101
Message-ID: <8525693D.0044D9A5.00@deinet01.dukepower.com>
Mime-Version: 1.0
Content-type: text/plain; charset=us-ascii
Content-Disposition: inline

Bob, W3CD, did well with his method of determining the thermal resistance of the plate. This is the way the heatsink manufacturers figure out this stuff too. In fact, if you look at Thermalloy or Wakefield catalogs, they pretty well describe the methods to use to figure out what kind of heatsink to use. Much is just like Bob described. And it seems to me I ran across some info somewhere that gave some info on sizing of alum plate of varying thickness for the square inches needed to dissipate various wattage levels. I will bet that something is available on the net as well - might even be in Thermalloy or Wakefield catalog but would be awhile before I could check.

There are also other considerations to think about -- heatsink in enclosure or open air, is it attached to something else like a chassis, etc. All these are various thermal resistances that factor into the equation. Is kind of interesting to note that you can look at all these thermal resistances like a series reistance circuit -- hint, hint.

Hehehe! But if I were Karl, even with both of us being EEs, I would, in true "ham" fashion, go ahead and hook the transistors up, see how they play, and see how warm things get before I went to the trouble of heatsink re-design.

Go for it, Karl!

72 - Watson/WB4EXW

Date: Wed, 16 Aug 2000 08:45:22 EDT
From: ARDUJENSKI@aol.com
To: qrp-1@lehigh.edu, wptodd@techline.com
Subject: [77480] OPS: Message Relay Exercise?
Message-ID: <46.95ff1c5.26cbe6e2@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Much of our efforts seem to be focused on how low a power or how many contacts. It might be interesting to have a message relay night where the message originates from one coastal state say East Coaster and the 1 needs to pass it on to a 2 and then on to a 3 operator and so on until you get it as far west as possible. It would be a simple paragraph and allow no repeats. Here is how it might be set up:

*Constraints would be say you have a limited time frame (say 2 hours) to see how far the message gets and how accurate it gets there.

*Several 1 stations would each have a different paragraph

*The 1's would send out a CQ for a 2 zone station, etc. Probably be a call like CQ CQ QRP2 de.....

*No repeats and even if you heard the previous exchange you relay only what you actually receive from the relaying station.

*There would be an initial line exchange to allow you to QRS if necessary then once the message starts no further adjustment allowed

* Object would be to go as far west as possible in a limited time frame and see what the original and final messages end up being.

One of the questions is how does QRP fit in to the emergency picture, well here might be a fun and useful exercise to find out?. The provision would be no teams and no winners, just see what the results are from a pure exercise and fun perspective.

Alan KB7MBI in Woodinville, WA

Date: Wed, 16 Aug 2000 06:15:32 -0700
From: "Mont Pierce" <MyGrapeVine@yahoo.com>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [77481] Re: Heatsinking 101 garbled...
Message-ID: <003e01c00784\$0f96ea40\$27010101@RTA>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hmmm.... My universal translator seems to be offline.... :)

----- Original Message -----

From: <wgabriel@dukeengineering.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Sent: Wednesday, August 16, 2000 5:32 AM
Subject: Heatsinking 101

>
>
> Bob, W3CD, did well with his method of determining the thermal resistance of the
> plate. This is the way the heatsink manufacturers figure out this stuff too. In
> fact, if you look at Thermalloy or Wakefield catalogs, they pretty well describe
> the methods to use to figure out what kind of heatsink to use. Much is just like
> Bob described. And it seems to me I ran acraWMOuikgLSBQ
> aG90b2RleCBDb3Jwb3JhdGlvbiAoaHR0cDovL3d3dy5waG90b2RleC5jb20p/9sAQwAGBAQFBAQG
> BQUFBgYGBWkOCQkICAKSDQ0KDhUSFHVEhQUFxoHhBcYHxkUFB0nHR8iIyU1JRYcKSwoJCshJCUK
> /9sAQwEGBgYJCAKRCQkRJBgUGCQkJCQkJCQkJCQkJCQkJCQkJCQkJCQkJCQkJCQkJCQkJCQk
> JCQkJCQkJCQkJCQk/8AAEQgBiAJiAwEiAAIRAQMRAf/EABwAAAAIDAQEBAQAAAAAAAAAAAMEAQIF
> AAYHCP/EAD4QAAEEAQMBCQIFAgUDAwQDAAEAAGMRBBiHMQVBEyJRYXEGMhRCgZGhI1IHFWKxwTPR
> 4UNTchY0kvAkk/H/xAAZAQADAQEBAAAAAAAAAAAAAAAAAABAgMABAX/xAA1EQACAgIDAQACAwEBAQAA
> AAAAAQIREiEDMUFRE2EEIjJxFL/2gAMAwEAAhEDEQA/AG2EOXE0hj2ViQ7heOnWjrdltx3V2e6F
> urtKy0Fhbpu+6hjge6htkUuJ01ERo03cbu0QqtPurWXC LGKu23pXY4gLgNQufaFooEgrC1zVND1
> BaKGyJGTpo8phC4ohSwnuqMuqV/uSUFIs22uNIjSUNnoeVZrtuW36WiopGCTGk2rtIQhe3/dXdtw
> hiKpFtlNaeaQ9Y4sfurjT3K20rCXa5u/spsVwhhoGpX/AC2smEs3YbkKxACGRtwV1n5Wa+GsKTav
> bUBpIJtc19VaV9AC3Z2Ug3sh7u42+VAcQVlFIYIdjyFzXe6q4nnSojJPZKZFy6lZpHoh6h33Vg4B
> CgpWSXAGlwN1DcSoDiEPTbCauymyUPUdh2XCu2i20ZKw1D1XXuh11Kb3Sxf0J

Date: Wed, 16 Aug 2000 08:29:55 -0500
From: david gauding <nfor@slacc.com>
To: qrp-1@lehigh.edu
Subject: [77482] Re: SD20 Parts...(and more)
Message-ID: <4.3.2.7.0.20000816055515.00b6a940@bbs.galilei.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Hello Danny (and Steve),

One way to protect the fragile base section of the SD-20 pole in an extended overhead mount is to simply slide it over 1.250" dia. aluminum antenna tubing. The jam fit in the gently tapered base section creates an overlap of 6-9 inches, depending on the pole. The weight bearing down on the overlap is negligible so there is no excessive strain placed on the fiberglass base tube when it is in position.

However, apparently being laid-up by hand the fiberglass base tubes vary in bore size. This means some may be too small to fit. Then it becomes a pick and choose exercise with later South Bend production rods (and the Black Widow brand) tending to be smaller.

During early testing of the standard SD-20 pole at lofty heights it became obvious that no matter how light the horizontal antenna, the sail area and resulting flex at the feedpoint can be a problem in brisk winds. On the other hand, for a wire vertical this is rarely a concern. Ditto if the aluminum support itself is extended electrically with a wire and the entire 50' assembly fed as a vertical or an inverted-L.

I finally put the theory into practice with a portable antenna support called the St. Louis Shaft. It uses an upgraded (tube sizes) and modified (base mount) aluminum antenna support originated by the Random Wire Vertical. That article was reprinted in the January 1995 issue of "QQ" by then Technical Editor, NN1G and is/was on the late G3YCC's website along with an update.

The modified RWV support is 33.5' and with the SD-20 rod added brings the tip/feedpoint to exactly 50'. The tip section of the rod is dropped out of the tube set to provide structural rigidity at the expense of 3' in height potential. (This was a protracted and agonizing decision! <g>) The final configuration of the support assembly uses only one tri-guying set at the 6' level and like the parent design is quite stable in use.

The SLS was tested extensively this past winter and spring with a lightweight NorCal Doublet and/or St. Louis Doublet. Also, with a remotely tuned St. Louis Express configured as a vertical or as an extended one-element beam. It survived some pretty nasty storms rather well which in turn helped refine the project. The testing program has covered almost a year and is close to completion.

We used the SLS for the St. Louis QRP Society's Field Day this year. Needless to say, before the SLQS name goes on it our membership wants to make sure any project works as claimed on the air. Also, in this instance, that is safe. One tends to look sideways at very portable 50' antenna structures until a reasonable comfort level is established! Missouri isn't known officially as the "Show Me" state without good cause! <g>

The SLS held a St. Louis Doublet for 15M and 80M. It had an 88' flat-top (per consultation with KK6MC/5 and KI6DS) and a WE6W-type ribbon cable feedline about 90' in length. The antenna was configured as an inverted-vee with the ends held aloft at 20' by additional SD-20 poles. The SLD contributed 126 CW contacts to our total of 474 on HF.

The antenna support assembly nests to about 6.5' and is easily transportable by car. The complete antenna installed at the operating location in less than 20 minutes. After Field Day the antenna went back up in my yard with a NorCal Doublet on top, i.e. the "summer antenna"! <g>

The St. Louis Shaft needs to be refined just a little more to make it easily repeatable before being released as a completed project in the "Peanut Whistle". That article will be submitted to NorCal for consideration for reprinting "QRPP".

Anyway, this is one solution (though still under test) for getting the SD-20 pole up a little higher. I'm sure others have ideas along these same lines and with expectations they will be discussed here or in forthcoming articles.

Regards,

de Dave, NF0R nf0r@slacc.com

At 04:20 AM 8/16/00 -0400, you wrote:

>Hi Steve,

>

>Sorry to hear the poles busted. My first thought would be to reinforce the
>lower end of the poles with something like a wooden dowel and/or silicon
>Caulking. One thought is to Put a Blocking Plug inside the Metal Antenna
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>Plumbers flux before assembly. :^)

>

>

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>source of Replacements. I was also thinking that I might find some fiber
>glass pole blanks and replace the top section with something a bit more
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>

>

>

>Sir George, The First :^)

>

>72 ES

>QRP DX TU (C) 1986, G. "Danny" Gingell, K3TKS@ abs.net

>QRP A.R.C.I. Net Manager and Board of Director Member.

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>Maryland Milliwatt Club Founder and Trustee of Club Station - WQ3RP -
>Grid Square FM19mb 76.94 W - 39.06 N Silver Spring, MD 20904 QRPea.A.

Date: Wed, 16 Aug 2000 09:57:02 -0400
From: Ed Lawson <elawson@lawson-philpot.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [77483] EMTECH alignment question
Message-ID: <00081610240501.00751@office4.office.new>
Content-Type: text/plain
MIME-Version: 1.0
Content-Transfer-Encoding: 8bit

I am trying to go through the alignment on an EMTECH rig to be sure it is tweaked up. Why is unclear to me as the receiver is really clean and hot. Just a ham I guess. Anyway, the instructions regarding adjusting the VBT/BFO are confusing to me as it seems to say adjust C20 for a null (which I assume means zero beat) of the signal at the point I would expect the signal to be peaked. If anyone has experience with this adjustment, I would appreciate an explanation of how it is done.

Ed Lawson
K1VP
NH

Date: Wed, 16 Aug 2000 09:20:27 -0600 (MDT)
From: "Paul Harden, NA5N" <na5n@rt66.com>
To: Tom and Roxy <zikot@erie.net>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [77484] Re: Toroid Question
Message-ID: <Pine.SUN.4.10.10008160853550.3377-100000@shell.rt66.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 16 Aug 2000, Tom and Roxy wrote:
> Does anyone know what the diameter
> of a T50-2 would be, OD in inches or Centimeters?

The first "number" identifies the diameter:

T37 = .375 in. dia
T50 = .50 in. dia
etc.

The second number is the "permeability" factor, or AL number that basically tells you how much uH per turn you will get. For the two most popular:

T37-2 AL=40
T50-2 AL=52
T37-43 AL=420
T50-43 AL=523

To calculate the inductance of a toroid:

$$L(uH) = (AL \times N^2)/10,000$$

where N^2 = number of turns "squared"

To calculate the number of turns required for a desired L(uH):

$$N = 100 \times \sqrt{L(uH)/AL}$$

Example:

1. What is the inductance of 20T on a T37-2?

$$L(uH) = (40 \times 400)/10000 = 1.6 \text{ uH}$$

2. How many turns do I need on a T50-43 for 10uH?

$$N = 100 \times \sqrt{10uH/523} = 13.8 = 14 \text{ turns}$$

GL, Paul NA5N

Date: Wed, 16 Aug 2000 11:25:14 -0400
From: "Bill Wetherill" <n2wg@wilmington.net>
To: "QRP-L" <QRP-L@lehigh.edu>
Subject: [77485] For Sale
Message-ID: <000901c00796\$2ded7740\$e36148c7@n2wg>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

The following items are for sale:

OHR-500 with keyer - \$ 325.00
OHR-100A (40meters) - \$ 95.00
information on these rigs at:
<http://www.morsex.com/ohr/>

Contact me a n2wg@wilmington.net or (910) 395-1429

72, Bill - N2WG

Purity of Essence - QRP

Date: Wed, 16 Aug 2000 11:32:53 -0400
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>
To: QRP-L Discussion Group <QRP-L@Lehigh.edu>
Cc: "W.D.(Doc)Lindsey/K0EVZ" <70511.3041@compuserve.com>
Subject: [77486] K0EVZ FOX Log (final)
Message-ID: <200008161133_MC2-AFF5-7211@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain;
 charset=ISO-8859-1
Content-Disposition: inline

Gang:

Here is the final log for my outing of August 10, 2000. Thanks for those= who sent in corrections, and I hope everything is correct now. It has been a privilege to serve as a FOX this summer.

Time	Call	Sent/Rcvd	St/Prov	Name	#/Pwr
0100	N5TW	569/559	TX	Tom	1474
0101	N4ROA	559/569	VA	Dan	970
0102	W5YR	559/559	TX	Geo	1373
0103	N6MM	569/579	CA	Harvey	5w
0104	W7ILW	569/559	AZ	Howard	2010

--					
-					
0105	K5DI	559/579	NM	Karl	2195
0106	K7QO	569/599	AZ	Chuck	1
0107	VE7SL	569/559	BC	Steve	769
0108	NK7M	569/559	AZ	Bob	271
0109	W1XT	559/579	AZ	Bob	262

--					
-					
0110	NQ7X	569/559	AZ	Floyd	343 =
0111	AE9F	559/559	CA	Dan	5w
0112	AJ4Y	569/559	FL	Paul	1795
0113	AA7EQ	569/559	AZ	Bob	2186
0114	AF4PS	559/559	FL	Mac	704

--					
-					
0115	K6VNX	599/579	CA	Arlen	5w
0116	W6ABC	569/559	CA	Jack	2193
0117	WA7SPY	569/559	CA	Glenn	2214
0219	W7MD	599/559	AZ	Damon	2190
0121	N6WG	559/339	CA	Bob	26

--					
-					
0122	NK6A	559/559	CA	Don	1517
0123	AJ4AY	549/559	AL	Jay	1372
0125	N5IW	599/559	TX	Dave	1718
0120	K5TR	569/559	TX	Geo	5w
0127	N5IB	559/559	LA	Jim	1913

--					
-					
0128	W7QQQ	569/559	AZ	Jack	1210
0132	K5OI/M	579/559	NM	Tim	73
0133	WB5CMA	559/559	LA	Gloria	5w
0138	W9UQB	569/559	AZ	Mike	413
>>>>	QSY to 14058.7 (on K2 dial) <<<<<<<<<				
0143	K5ZTY	579/559	TX	Bill	473

--					
-					
0144	W2XN	559/559	FL	Fred	1728
>>>>	QSY to 14060 <<<<<<<<<<<<<<<<<<<<<<				
0153	W5YW	569/579	LA	Mike	5w
0154	K9IUA	599/599	ND	Kevin	384
0156	W6ZH	569/559	CA	Pete	257
0158	VA6RF	559/559	AB	Earl	1076 ex VE6E=
WM					

--					
-					
0159	KG4IKQ	599/599	NC	Jim	5w
0205	N1TP	539/549	FL	Tom	1317
0207	NW7DX	549/339	WA	Ben	1892
0224	KQ5U	559/559	TX	Terry	1603
0227	KA1DDB	549/339	MI	Mike	2064

-----=
--
-
0237 N5FC 579/570 TX Monty 2202
0259 K0EVZ xxxxxxxxxx ND Doc 861 Da F0=
X

72/73,
--W.D. (Doc) Lindsey
DSBF
PO Box 6028
Bismarck, ND 58506
(Shipping =3D DSBF, 2020 Lovett Ave, Bismarck, ND, 58504)
E-Mail =3D K0EVZ@arrl.net

Date: Wed, 16 Aug 2000 09:06:56 -0700
From: Charlie Panek <charlie_panek@agilent.com>
To: qrp-1@Lehigh.EDU
Subject: [77487] Re: More Engineer thoughts
Message-ID: <399ABC20.1B337098@agilent.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Karl Larsen writes:

>According to the data sheet, if we can get .25 watts of drive to
> the transistor, and have 12 vdc we get typically 7.5 watts of RF and the
> transistor is 60% efficient.
>
> This means just 1 xister to cool and I will calculate the heat
> dissipated correctly this time...:-(We get 7.5 watts output with 60% eff
> and that means that $40/60 = 7.5/x$ or $x = 7.5 (60/40) = 11.25$ Watts of heat
> to dissapate. This may still be a problem but there are more options with
> just 1 transistor.
>

I think there's a problem with your efficiency calculations. If
the efficiency is 60%, then 60% of the input power turns into
RF power to the antenna, and 40% is dissipated as heat in the transistor.

Thus $12.5 \text{ W DC input} \times 0.60 = 7.5 \text{ W RF out}$
 $12.5 \text{ W} - 7.5 \text{ W} = 5.0 \text{ W dissipated.}$
(or $12.5 \times 0.4 = 5.0$)

All the power has to add up. Remember, energy is neither created or

destroyed.

— —

Charlie Panek Agilent Technologies Inc.
mailto:charlie_panek@agilent.com Everett, Washington

Date: Wed, 16 Aug 2000 10:40:45 -0600
From: "Bruce Kizerian" <kizerian@ced.utah.edu>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [77488] MFJ 8100 Regen
Message-ID: <02aa01c007a0\$b9816280\$de56d9d8@sarcos.com>

I have acquired an MFJ 8100 in non-working condition. However, it did not come with a manual. I can download the manual from MFJ's website, but it does not include the schematic. Does anyone know where I can get a copy of the schematic?

Bruce kk7zz

Date: Wed, 16 Aug 2000 10:42:14 -0600
From: "Bruce Kizerian" <kizerian@ced.utah.edu>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [77489] Solar Cell Arrays
Message-ID: <02b401c007a0\$ef07c700\$de56d9d8@sarcos.com>

The latest Electronic Goldmine Flyer has some inexpensive surplus solar cell arrays at good prices. Their web address is: <http://sales.goldmine-elec.com/>

I have no affiliation with them, but I have bought a bunch of stuff from them. They have always treated me well.

Bruce kk7zz

Date: Wed, 16 Aug 2000 13:15:45 -0400 (EDT)
From: Bob Patten <n4bp@bc.seflin.org>
To: QRP-L Reflector <qrp-l@lehigh.edu>
Cc: Marvin Reis <MER30@worldnet.att.net>, Sara Carey <sjcarey1@aol.com>, Olga

Suarez <olga.suarez@voicestream.com>, "Henry M. Seiden" <henry@techworksinc.com>,
Frank Scutch <w4fms@aol.com>, Eddie Schultz <mr.schultz@juno.com>, Josef
Salbaba <aon.912253826@aon.at>, Julio Ripoll <wd4jr@gate.net>,
Subject: [77490] VIRUS Warning!! (fwd)
Message-ID: <Pine.3.89.10008161330.A3732-0100000@bc.seflin.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

----- Forwarded message -----
Date: Wed, 16 Aug 2000 12:08:07 -0400
From: Thomas Lambert <thomas@dscassociates.com>
To: Bob Patten <n4bp@bc.seflin.org>,
Subject: VIRUS Warning!!

VIRUS Warning!!
You have just received the "Aggie Virus"!!!
As we don't have any programming experience, this Virus works on the honor
system. Please
delete all the files on your hard drive, and manually forward this Virus to
everyone on your mailing list.
Thanks for your cooperation.

Date: Wed, 16 Aug 2000 13:26:05 EDT
From: Macstein@aol.com
To: qrp-l@lehigh.edu
Subject: [77491] Antenna - Ok, time to do something.
Message-ID: <77.857b933.26cc28ad@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

I'm NOT giving up on the Infamous Attic Dipole... but, I'm gonna experiment
with some wire outside - deed restrictions and all. Missing the Chuck-Fox
was painful.

I have a homebrew (except the Emtech "Ladder Grabber") G5RV that I use
portable with mucho success. I have envisioned a way to deploy it from a
window in the house (read: now operating in Air Conditioning as opposed to
the existing Garage shack!) in a somewhat stealthlike fashion. I have a
bush hiding the 450 ladderline up to the roof BUT...

I would have to run part of the ladderline on the roof beside a gable peak...

meaning ON the roof, not suspended above it.

2. The ends would be higher than the feed point. "Real" "Vee" as opposed to inverted Vee. The feedpoint would be up maybe 20 feet and the ends 30 feet or more.

Questions:

Should I scrap the ladderline and go coax because of the 20 or so feet laying hidden ON the roof?

What are the negative effects of the ends being higher than the feed?

Should I just go for an even more stealthy loop in my oaks and palms?

Thanks in advance for your comments (and Brian, don't give me grief about abandoning my precious IAD!!)

72

-MAC-

AF4PS

Odessa, FL "Home of the Infamous Attic Dipole" and K2 #643

QRP-L # 704, FISTS #5096, CC #754, NorCal #1998, Zombie #510,
ARCI #9843, AR QRP #257, HI QRP #83, ARS # 751, Whiners #5,
SOC #28, West FL QRP, Flying Pig QRP #-51...
and various other annual \$15 commitments.

Date: Wed, 16 Aug 2000 13:37:40 -0400

From: "Brian" <brian@iquest.net>

To: <Macstein@aol.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: [77492] Re: Antenna - Ok, time to do something.

Message-ID: <001d01c007a8\$ad462750\$2b05080a@cincom.com>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Park a couple of junk cars in the yard, tie 'em together with speaker wire. Connect the speaker wire to your ZM-2 (it'll tune anything, sez so right on the box), your ZM-2 to your K2 and like magic you'll be working the world.

Have you thought about a stealth vertical?

----- Original Message -----

From: <Macstein@aol.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Sent: Wednesday, August 16, 2000 1:26 PM
Subject: Antenna - Ok, time to do something.

> I'm NOT giving up on the Infamous Attic Dipole... but, I'm gonna
experiment
> with some wire outside - deed restrictions and all. Missing the Chuck-Fox
> was painful.
>
> I have a homebrew (except the Emtech "Ladder Grabber") G5RV that I use
> portable with mucho success. I have envisioned a way to deploy it from a
> window in the house (read: now operating in Air Conditioning as opposed to
> the existing Garage shack!) in a somewhat stealthlike fashion. I have a
> bush hiding the 450 ladderline up to the roof BUT...
>
> I would have to run part of the ladderline on the roof beside a gable
peak...
> meaning ON the roof, not suspended above it.
>
> 2. The ends would be higher than the feed point. "Real" "Vee" as opposed
to
> inverted Vee. The feedpoint would be up maybe 20 feet and the ends 30
feet
> or more.
>
> Questions:
>
> Should I scrap the ladderline and go coax because of the 20 or so feet
laying
> hidden ON the roof?
>
> What are the negative effects of the ends being higher than the feed?
>
> Should I just go for an even more stealthy loop in my oaks and palms?
>
> Thanks in advance for your comments (and Brian, don't give me grief about
> abandoning my precious IAD!!)
>
> 72
> -MAC-
> AF4PS
> Odessa, FL "Home of the Infamous Attic Dipole" and K2 #643
>
> QRP-L # 704, FISTS #5096, CC #754, NorCal #1998, Zombie #510,
> ARCI #9843, AR QRP #257, HI QRP #83, ARS # 751, Whiners #5,
> SOC #28, West FL QRP, Flying Pig QRP #-51...

> and various other annual \$15 commitments.
>

Date: Wed, 16 Aug 2000 13:45:13 -0400
From: David Hinerman <dlh1009@ritvax.isc.rit.edu>
To: qrp-l <qrp-l@Lehigh.EDU>
Subject: [77493] Re: Antenna - Ok, time to do something.
Message-ID: <004001c007a9\$c1444c40\$2d0a05cc@rochester.com>
MIME-version: 1.0
Content-type: text/plain; charset=iso-8859-1
Content-transfer-encoding: 7BIT

> Park a couple of junk cars in the yard, tie 'em together with speaker
wire.
> Connect the speaker wire to your ZM-2 (it'll tune anything, sez so right
on
> the box), your ZM-2 to your K2 and like magic you'll be working the world.

Brian,

Now THAT is just too easy. I live in a mobile home park - I could sneak a
wire onto the trailers on either side of me and tune from there. How's THAT
for a capacity hat?

Anybody know the resonant frequency of a 14' x 70' trailer? (Acoustically
it's about 3 Hz, which just happens to be the rate at which the kids' feet
hit the floor when they're running.)

Dave

Date: Wed, 16 Aug 2000 13:50:31 +0000
From: Michael Neverdosky <mneverdosky@earthlink.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [77494] No cats heard today.
Message-ID: <399A8E17.2CDD8FD7@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I tried at 1200 and 1300 local time, 1600UTC and 1700UTC
but heard no CW signals at all on 10m.

I did hear a LU5 on USB at about 28.050.

I will try again tomorrow.

I am setting up at 13 wpm and will try both frequencies (28.065 and 28.115) each time I get on unless I am so flodded with contacts on my first call that I don't get to the 'other' freq.
It is a flip of the coin as to which freq I use to start.

michael N6CHV (in Central Florida)

Date: Wed, 16 Aug 2000 13:51:27 -0400
From: David Hinerman <dlh1009@ritvax.isc.rit.edu>
To: qrp-l <qrp-l@Lehigh.EDU>
Subject: [77495] cheep power supplies
Message-ID: <004801c007aa\$9ca41e50\$2d0a05cc@rochester.com>
MIME-version: 1.0
Content-type: text/plain; charset=iso-8859-1
Content-transfer-encoding: 7BIT

Folks,

If anyone has a need for inexpensive power supplies, here's a place worth looking:

http://www.compgeeks.com/cgi-bin/prod_disp.asp?cat=CobwebCorner

Computer Geeks Discount Computers sells closeouts, used, discontinued, and otherwise worthless (to the idle rich) junk at decent prices. I buy trailing-edge computer hardware from them routinely. I just noticed they have a bunch of 12 (and other) volt supplies for a few bucks each, depending on current rating. Might make a decent front end for that gel-cell float charger you're thinking of building.

No financial interest other than being a happy customer.

Dave

David Hinerman WD8CIV
Ontario, NY Grid FN13IF
dlh1009@rit.edu

Date: Wed, 16 Aug 2000 11:02:10 -0700
From: Charlie Panek <charlie_paneke@agilent.com>
To: qrp-1@Lehigh.EDU
Subject: [77496] Re: Toroid Question
Message-ID: <399AD722.8EDF1D0D@agilent.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

>
> On Wed, 16 Aug 2000, Tom and Roxy wrote:
> > Does anyone know what the diameter
> > of a T50-2 would be, OD in inches or Centimeters?
>
> The first "number" identifies the diameter:
> T37 = .375 in. dia
> T50 = .50 in. dia
> etc.
>
> The second number is the "permeability" factor, or AL number
> that basically tells you how much uH per turn you will get.
> For the two most popular:
> T37-2 AL=40
> T50-2 AL=52
> T37-43 AL=420
> T50-43 AL=523
>

A couple of other points about toroids:

- There are two general types of core material: Ferrite and Powdered Iron.
A toroid with a "T" prefix is a powdered iron toroid, and also will have a suffix (indicating permeability), like -0, -3, -2, -6.
A toroid with an "FT" prefix is a ferrite toroid. It would have a suffix like -43 or -63.

These two materials have different magnetic properties, with ferrite generally having higher permeability, but powdered iron cores resulting in higher Q inductors, especially at higher frequencies.

- Powdered Iron cores (at least those made by Amidon or Micrometals) are color coded, thusly:

Color	Suffix	Permeability	Freq Range
Green	-41	75	

Grey	-3	35	.05-.5 MHz
Red/White	-15	25	.1 - 2 MHz
Blue	-1	20	.5 - 5 MHz
Red	-2	10	1 - 30 MHz
Yellow	-6	8	10 - 90 MHz
Black	-10	6	60 - 150 MHz
Grn/White	-12	3	100 - 200 MHz
Tan	-0	1	150 - 300 MHz

- Ferrite cores have no color code that I'm aware of; most of the cores I've encountered are simply unpainted. The only way to determine the properties of an unknown ferrite core is to wind some turns on it and measure the inductance (at a relatively low frequency, like 100 kHz). You can then calculate the AL value that Paul mentioned, and compare that with data on various ferrite cores of that size, to guess what you've got.

The bottom line: I wouldn't use a ferrite core to wind an inductor for a transmitter output pi network. The typical ferrite core will make a lossy inductor at 7 MHz. You'd be better off with a molded RF choke of equivalent inductance. I calculate approx 1uH for 14 turns on a T-50-2.

72,
Charlie KX7L

--
Charlie Panek
mailto:charlie_panek@agilent.com Agilent Technologies Inc.
Everett, Washington

Date: Wed, 16 Aug 2000 14:03:10 -0400
From: "Mike Yettsko" <myetsko@insydesw.com>
To: <brian@iquest.net>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [77497] Re: Antenna - Ok, time to do something.
Message-ID: <007001c007ac\$4211b540\$2101a8c0@insydesw.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I actually saw this.

There was a web site a couple of years ago and I recall this CB/Ham guy did it on a bet for 11M/10M. The web site said it actually worked fairly decent (but 'decent' may just mean it worked at all if he was expecting nothing), so he put it on his web site and solicited more contacts...

If I find the old URL I can post it if people are interested... (There were pictures)

Let's see, some Motorcycles for 10M, compact cars for 15... Hmm, borrow some tractor trailers for 160M?

Mike

> Park a couple of junk cars in the yard, tie 'em together with speaker wire.

> Connect the speaker wire to your ZM-2 (it'll tune anything, sez so right on

> the box), your ZM-2 to your K2 and like magic you'll be working the world.

>

> Have you thought about a stealth vertical?

Date: Wed, 16 Aug 2000 13:58:11 -0400

From: "Mike Yetsko" <myetsko@insydesw.com>

To: <Macstein@aol.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Subject: [77498] Re: Antenna - Ok, time to do something.

Message-ID: <006f01c007ac\$41949600\$2101a8c0@insydesw.com>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

You know.... In some areas of the country it's considered decorative foliage to put up wire arrays and have vines climb them...

I can visualize a 'fan' array of strings with say honeysuckle growing on it, only all the 'wires' of the 'fan' are nylon fishing lines, and the

center wires of the 'fan' just happen to have this decorative pattern that coincidentally resembles ladderline....

Mike

> I'm NOT giving up on the Infamous Attic Dipole... but, I'm gonna experiment

> with some wire outside - deed restrictions and all. Missing the
Chuck-Fox
> was painful.
>
> I have a homebrew (except the Emtech "Ladder Grabber") G5RV that I
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> window in the house (read: now operating in Air Conditioning as
opposed to
> the existing Garage shack!) in a somewhat stealthlike fashion. I
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> bush hiding the 450 ladderline up to the roof BUT...
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> meaning ON the roof, not suspended above it.
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opposed to
> inverted Vee. The feedpoint would be up maybe 20 feet and the ends 30
feet
> or more.
>
> Questions:
>
> Should I scrap the ladderline and go coax because of the 20 or so feet
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> hidden ON the roof?
>
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> Thanks in advance for your comments (and Brian, don't give me grief
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> abandoning my precious IAD!)!
>
> 72
> -MAC-
> AF4PS
> Odessa, FL "Home of the Infamous Attic Dipole" and K2 #643
>
> QRP-L # 704, FISTS #5096, CC #754, NorCal #1998, Zombie #510,
> ARCI #9843, AR QRP #257, HI QRP #83, ARS # 751, Whiners #5,
> SOC #28, West FL QRP, Flying Pig QRP #-51...
> and various other annual \$15 commitments.
>

Date: Wed, 16 Aug 2000 14:05:47 -0400 (EDT)
From: "John L. Sielke" <w2agn@pobox.com>
To: Bob Patten <n4bp@bc.seflin.org>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [77499] RE: VIRUS Warning!! (fwd)
Message-ID: <XFMail.000816140547.w2agn@pobox.com>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
MIME-Version: 1.0

Naughty Naughty! You're gonna get a wrist slap from the humor police!

On 16-Aug-00 Bob Patten wrote:

> ----- Forwarded message -----
> Date: Wed, 16 Aug 2000 12:08:07 -0400
> From: Thomas Lambert <thomas@dscassociates.com>
> To: Bob Patten <n4bp@bc.seflin.org>,
> Subject: VIRUS Warning!!
>
> VIRUS Warning!!
> You have just received the "Aggie Virus"!!!
> As we don't have any programming experience, this Virus works on the honor
> system. Please
> delete all the files on your hard drive, and manually forward this Virus to
> everyone on your mailing list.
> Thanks for your cooperation.

/\ /\ /\ /\ /\ John L. Sielke w2agn@pobox.com w2agn@qsl.net
(W | 2 | A | G | N) NJ Grid:FM29LN <http://www.qsl.net/w2agn>
//_/_/_/_ NJ-QRP #57 QRP-L #884 QRP-ARCI ARQrp #86
X-N4JS, W4MPC, W7JEF, K3HLU G-QRP #9544 NorCal CQC AKQRP QCWA FISTS #2781
fpQRP #121 SOC #390 Elecraft K2 #00023

Date: Wed, 16 Aug 2000 18:20:39 +0000 (GMT)
From: "Geoff QRP-L mailing list" <geoffqrp@wormhole2.com>
To: "George Gingell " <k3tks@u1.abs.net>
Cc: "Low Power Amateur Radio Discussion " <qrp-1@Lehigh.EDU>
Subject: [77500] Re: SD20 Parts...
Message-ID: <96645003915106-16142015106geoffqrp@wormhole2.com>

On Wed, 16 Aug 2000 George Gingell wrote:

"snip"

> Anyway, keep us posted on how you make out. It would be nice to find a
> source of Replacements. I was also thinking that I might find some fiber
> glass pole blanks and replace the top section with something a bit more
> sturdy.

>

> It sure would be great if we could find some 60' "Black Widows" about 2"
> or so at the bottom end. Maybe something that would slip inside a Corner
> Post on the Chain link Fence? I guess they call them "Flag Poles"

"snip"

What about the fiberglass poles the electric co. uses to install fuses without climbing the pole? Also saw a long pole in use to change lights in a gym without climbing either.

Geoffrey E. Sachse
Lyndonville VT
geoff@wormhole2.com
kb1dsq@arrl.net
www.wormhole2.com
KB1DSQ

Date: Wed, 16 Aug 2000 11:50:30 -0700
From: David Shalita <af389@lafn.org>
To: "Ham-Homebrew@ucsd.edu" <Ham-Homebrew@ucsd.edu>, "qrp-1@Lehigh.EDU" <qrp-1@Lehigh.EDU>
Subject: [77501] OT-CD_ROM "help"
Message-ID: <399AE276.DEAB32B@lafn.org>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

This is VERY off topic. Please correspond to me directly, not the digest.

I really need the help and knowledge of this group.

My old 6X CD_ROM is dying but still partially usable.
Bought new generic 52X CD_ROM. 52X CD_ROM is found during boot, but stalls boot. Bought new MEMOREX 48X CD_ROM. Same problem, stalls the

boot.

Only have an 8.4 GB MAXTOR HD on IDE PRIMARY as MASTER.
New CD_ROM is SLAVE on either IDE PRI or SEC. Prevents boot from
completing either way. When I install my OLD ACER CD_ROM, same cables,
SLAVE on PRI or SEC, boot is OK.

What do I need to adjust in CMOS Setup to use this CD_ROM?

Thank you, 73, W6MIK, Dave Shalita

Date: Wed, 16 Aug 2000 12:14:19 -0700 (PDT)
From: Doug Bankston <dougbankston1@yahoo.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [77502] QRPers Internet Surfing Guide(Short)
Message-ID: <20000816191419.15150.qmail@web4302.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Guys,

Just wanted to let you know that the
latest/greatest bi-weekly edition of the QRPers
Internet Surfing guide was just posted on
www.qsl.net/vqs (Click on Barefoot Radio, then "Drudge
Report)..... (Why waste your time surfing the net
when we can do it for you) As a service to the qrp
community, this column will be updated every two
weeks...

73/72

W4IDW/qrp

Virginia QRP Society

Do You Yahoo!?
Send instant messages & get email alerts with Yahoo! Messenger.
<http://im.yahoo.com/>

Date: Wed, 16 Aug 2000 19:20:12 GMT
From: "Tom Dufresne" <tdufres@hotmail.com>
To: qrp-l@lehigh.edu
Subject: [77503] Output QRP
Message-ID: <F264MG0V6T0nfMa7RtM00001da4@hotmail.com>

Mime-Version: 1.0

Content-Type: text/plain; format=flowed

Gang: Would low volt capacitors (50v +/-20%) cause attenuation of my RF energy? Output from my last transformer is 80.0V, thru first filter capacitor (150pF 50V +/-25%) drops to 60V, then thru last capacitor (same) drops to less than 26V! Sorry to sound stupid, but am I on the right track for solving my low output problem with my QRP CW xmitter?

Tom

Get Your Private, Free E-mail from MSN Hotmail at <http://www.hotmail.com>

Date: Wed, 16 Aug 2000 12:21:09 -0700 (PDT)

From: Quinn Farnes <quinn_farnes@yahoo.com>

To: qrp-1@lehigh.edu

Subject: [77504] CW filter for Yaesu FT-7?

Message-ID: <20000816192109.3403.qmail@web4102.mail.yahoo.com>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

I have an old Yaesu FT-7 (historical note: one of the first HF transceivers that didn't use those glass-envelope-transistor things) that I am rather attached to. Does anyone know if there's a way to cobble something together that approximates the 500-Hz CW filter that used to be available for this rig? I'd like to take it with me for CW mobile operation, and 2.3 KHz is. . . well . . . a little broad.

Thanks for any suggestions.

Quinn Farnes, WB6TDC

Laguna Beach, CA

=====

end

Do You Yahoo!?

Send instant messages & get email alerts with Yahoo! Messenger.

<http://im.yahoo.com/>

Date: Wed, 16 Aug 2000 15:26:12 -0400
From: "C. M. Martin" <caitlyn@netferrets.net>
To: quinn_farnes@yahoo.com, Quinn Farnes <quinn_farnes@yahoo.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [77505] Re: CW filter for Yaesu FT-7?
Message-ID: <0008161531170G.01069@fwall.i-bn.net>
Content-Type: text/plain
MIME-Version: 1.0
Content-Transfer-Encoding: 8bit

Hi, Quinn, and everyone else,

> I have an old Yaesu FT-7 (historical note: one of the
> first HF transceivers that didn't use those
> glass-envelope-transistor things) that I am rather attached
> to.

As an all-analog rig, the receiver has a very low noise floor and hears very well, indeed. It's amazing how well they hold their resale value, and how many people really like them (myself included).

> Does anyone know if there's a way to cobble something
> together that approximates the 500-Hz CW filter that used
> to be available for this rig?

Inrad still has CW filters available for the FT-7. The only problem is that there is only the one filter slot, so if you replace the SSB filter with the CW filter you effectively lose SSB. Of course, there are many die hard CW ops who really could care less about SSB and have made this change.

Another option is to use a good external AF DSP that can make CW tolerable. It's not as good as a real crystal CW filter, of course, but it is an acceptable compromise. Something like a JPS NIR-12 (which I use) will really do a nice job.

73,
Caity
KU4QD

Date: Wed, 16 Aug 2000 14:27:42 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: "Robert P. Okas" <vintage@best.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [77506] Re: Heatsinking 101 Was Re: Engineering Problem

Message-ID: <Pine.LNX.4.10.10008161425510.1651-100000@cannac.ampr.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Thanks for the data and I can't do it just now, no 20 watt 8 ohm resistor or good temp gauge. I will use transistors and just try it. If it burns my fingers I will un-key the rig.

On Tue, 15 Aug 2000, Robert P. Okas wrote:

> Hi Karl,
>
> If you're interested in an engineering solution, you need to
> determine the thermal resistance of that 4 sq. in. hunk of alumimnum. To
> do this, you'll need a reasonably accurate way to measure temperature. An
> indoor/outdoor digital thermometer, like that available from Radio Shack,
> should be good enough. Use the remote outdoor sensor. You will also need a
> calibrated heat source. An 8 Ohm resistor connected to a 12V supply
> dissipates 18 watts.
>
> Thermally bond the resistor to the chassis. You'll need the silicone
> grease to do this adequately. Attach the thermometer's sensing element in
> a like manner. Note the starting temperature. Apply power to the resistor
> and let the temperature stabilize. This should take only a couple of
> minutes due to the low thermal mass of the plate. Note the new
> temperature.
>
> You can calculate the heatsink's thermal resistance by:
>
>
$$R = \frac{T(\text{hot}) - T(\text{cool})}{\text{Power In}}$$

>
> The thermal resistance is in units of degrees/watt. Celsius is
> customary temperature scale. Once you know the thermal resistance, you
> can predict the heathsink's temperature rise for a given power
> dissipation using the following equation:
>
>
$$\text{Trise} = R * \text{Pdiss}$$

>
> Where: R = Thermal resistance
> Pdiss = device power dissipation.
>
>
> The power transistors you plan on using also have some thermal
> resistance from the junction to the mounting tab. This value gets added to

> the heatsink's thermal resistance.
>
> In very general terms, most bipolar power transistors can survive a
> junction temperature of 100 degrees C, but their lives will be shortened.
> Stay within the published SOA (Safe Operating Area) for long device
> life. The cooler the junction, the happier the transistor! ;-} ;-}
>
> I hope you all find this helpful
>
> 73,
> Bob - W3CD
>
>
> On Tue, 15 Aug 2000, Karl F. Larsen wrote:
>
> >
> > As an EE I am qualified to build a class B push-pull amplifier but
> > not to estimate heat flow and the temperature rise over time. So I'm
> > asking for some help in this area.
> >
>
>
>
>

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

Date: Wed, 16 Aug 2000 15:26:07 -0500
From: "Jay Bromley" <w5jay@alltel.net>
To: <windal@azstarnet.com>, "Low Power Amateur Radio Discussion" <qrp-
1@Lehigh.EDU>
Subject: [77507] Re: SMK-1 availability
Message-ID: <00a401c007c0\$40981d80\$579b66a6@default>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Bill and all,
Doug is furthering his education before this school season and is not around
a computer. It will be a few days before he is back at the grind. Thanks
and 73 de w5jay..

----- Original Message -----

From: "Bill Walker" <windal@azstarnet.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Tuesday, August 15, 2000 9:28 PM
Subject: SMK-1 availability

> Please help!
>
> Could anyone tell me if the NorCal SMK-1 kits are available?
> I've already sent two emails to Doug Hendricks but have received no
response.
> Is there someone else that I should contact?
> I would like to order one of these kits but I want to make sure that they
are
> available first.
>
> Thanks...
>
> --
> Bill Walker - KD7JZB
> windal@azstarnet.com
> <http://www.azstarnet.com/~windal/>
>

Date: Thu, 17 Aug 2000 03:52:10 +0700
From: "Donny Sirait" <dsirait@centrin.net.id>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [77508] Re. Toroid question
Message-ID: <007501c007c5\$7f6a5280\$dfec92ca@donnysirait>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Friends,
Paul and Charlie, thank you for your very informative
postings, however a question comes to my mind
(since toroids are not common here in YB).
Charlie mentioned that only Iron cores have
color codings. Are those colors painted or
made of some plastic coverings?

I found several toroids that were colored gray from

damaged circuits but then I found that the gray color comes from a plastic (some sort of plastic) covering that I can peel off. Is this just special to the toroids I found or are the other (from Amidon) were also covered by some kind of plastics?

Thank you for your kind attention.

vy 73 de YB1BOD
Donny Sirait
Bekasi Indonesia

Date: Wed, 16 Aug 2000 17:12:07 EDT
From: Dean W Manley <kh6b@juno.com>
To: Macstein@aol.com
Cc: qrp-1@Lehigh.EDU
Subject: [77509] Re: Antenna - Ok, time to do something.
Message-ID: <20000816.111744.5391.1.kh6b@juno.com>

Hi Mac and group,

Sure sounds like an upgrade, putting the antenna outdoors. I would opt for the ladder line for the flexibility. Save the coax for a "backup" if needed. Good luck, Mac.

You really don't *need* the outdoor antenna if I can hear you with your attic antenna. :-)

Aloha,

Dean KH6B
Hilo Hawaii

On Wed, 16 Aug 2000 13:26:05 EDT Macstein@aol.com writes:
>I'm NOT giving up on the Infamous Attic Dipole... but, I'm gonna
>experiment
>with some wire outside - deed restrictions and all.

YOU'RE PAYING TOO MUCH FOR THE INTERNET!
Juno now offers FREE Internet Access!
Try it today - there's no risk! For your FREE software, visit:
<http://dl.www.juno.com/get/tagj>.

Date: Wed, 16 Aug 2000 16:23:24 -0500
From: "Kanalz, Karl" <Karl.Kanalz@allegiancetelecom.com>
To: "'quinn_farnes@yahoo.com'" <quinn_farnes@yahoo.com>, Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [77510] RE: CW filter for Yaesu FT-7?
Message-ID:
<4734702CFA3CD411A74A00805F57A3B703E3F44C@dfwex01.allegiancetelecom.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

I don't recall the FT-7 ever having a narrow CW filter position (or the filter, for that matter!) available - leaving it up to the owner to "live with" that 2.3 kHz filter, Quinn. I have a friend in California with an FT-7, and he reckons that with some semi-extensive modifications to the wiring, he could finagle in somebody's else's narrow filter (even a Yaesu), but the switching would then make it messy to get it back on SSB should the occasion warrant. In the end, he decided it wasn't worth the effort and just left it as a QRP rig for SSB.

Karl K - W8TIF
McKinney, Texas

-----Original Message-----

From: Quinn Farnes [SMTP:quinn_farnes@yahoo.com]
Sent: Wednesday, August 16, 2000 2:21 PM
To: Low Power Amateur Radio Discussion
Subject: CW filter for Yaesu FT-7?

I have an old Yaesu FT-7 (historical note: one of the first HF transceivers that didn't use those glass-envelope-transistor things) that I am rather attached to. Does anyone know if there's a way to cobble something together that approximates the 500-Hz CW filter that used to be available for this rig? I'd like to take it with me for CW mobile operation, and 2.3 KHz is. . . well . . . a little broad.

Thanks for any suggestions.

Quinn Farnes, WB6TDC
Laguna Beach, CA

Date: Wed, 16 Aug 2000 17:35:50 EDT

From: KF4YYD@aol.com
To: <qrp-1@lehigh.edu>
Subject: [77511] Re: Hull tapping 101
Message-ID: <200008162135.RAA225588@nss4.cc.lehigh.edu>
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

All the radio men I served with knew Morse, they may not of been pros at it but they knew it. I agree with Paul NA5N, as a former member of the "Silent Service" my heart goes out for them.

Tom ET2(ss)

Date: Wed, 16 Aug 2000 15:13:03 -0700
From: "Bob Tellefsen" <n6wg@earthlink.net>
To: <qrp-1@Lehigh.EDU>
Subject: [77512] Re: Antenna - Ok, time to do something.
Message-ID: <001901c007cf\$26505f00\$8bd2fc9e@oemcomputer>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Mac

There is no need to scrap your ladder line. Laying on the roof is not a problem. When it rains, you will see some detuning, but the losses are not enough to worry about. Just retune and soldier on.

The effect of the ends being higher then the center feed point places the center of radiation somewhere between those two elevations. I would estimate about one third of the distance between them.

If you can do the loop, it is a great antenna. Most folks use them on multiple bands, with larger loops being easier to multiband than small loops. Your feedline can be almost invisible if you make it from parallel thin wires spaced maybe 1 to 6 inches apart.

As a business seminar once claimed, don't be afraid to think outside the box. You may come up with a creative and effective antenna that no one else has used.

73, Bob N6WG

Date: Wed, 16 Aug 2000 15:25:42 -0700
From: "Bob Tellefsen" <n6wg@earthlink.net>
To: <qrp-1@Lehigh.EDU>
Subject: [77513] Re: Re. Toroid question
Message-ID: <001d01c007d0\$ea7e1f60\$8bd2fc9e@oemcomputer>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Donny

I suspect that the cores you have covered with gray plastic are from a computer application, and are suitable only for low frequency work, maybe switching power supplies.

If you have a low power transmitter that covers 160m up to 10m, you could try a cheap experiment to see what you have.

Close wind 5 or 6 turns of insulated wire on one side of the toroid and connect this to a dummy load. Wind another identical winding on the other side of the toroid and connect it to the output side of your swr/wattmeter. Connect your transmitter to the input side of the swr/wattmeter.

Start at 160m with the lowest power that gives a usable reflected power indication. If the toroid is only good at low frequencies, as you go up in frequency, the reflected power should increase. If it is good for rf, the reflected power may still increase, but perhaps at a lower rate, indicating the core is transferring the rf to the other winding and then to the dummy load.

73, Bob N6WG

Date: Wed, 16 Aug 2000 18:39:06 -0400
From: "C. J. Ludinsky" <cjl@mitre.org>
To: neqrp@jona1.net, qrp-1@lehigh.edu
Subject: [77514] NEQRP CW Net Thursday 9:00 PM EDT, 3561 MHz
Message-ID: <399B180A.C0FDF7E3@mitre.org>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The NEQRP WQ1RP CW net meets again on Thursday night at 9:00 PM EDT (Friday, 0100Z). Thursday's net will be on 80M, on or around 3.561 MHz. Net op will be Chuck, K1CL.

Last week's net on 40M was a washout, with very low signal levels, high and unusual QRN, and S9+20 SSB QRM. Steve, "melt solder", KD1JV, reported:

"My first attempt at being net control ended as a total bust. The QRN was very strong last night (remnants of the GMS?) If anyone tried to check in, I simply could not hear them.

To make matters worse, some time during the net intro, a QSO started up under me on 7.041. Once I figured that out, I moved up to 7.0415 and started again, but this time a strong SSB station started up on or near the freq. I believe someone tried to check in, but between the QRM and QRN, simply could not make out the call. Sri.

Oh well."

Anyway, we're hoping for better conditions on Thursday, at least in the Northeast. So, stop by and say hello.

72 DE K1CL,
Chuck.

Date: Wed, 16 Aug 2000 15:32:45 -0700
From: "Tom Scott" <TomRScott@Sterlink.net>
To: "'qrp-l Reflector'" <qrp-l@Lehigh.EDU>
Subject: [77515] edu: emergency CW tapping...
Message-ID: <000001c007d2\$48dacf80\$7e100f0a@wyle.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I sympathize with the desire to not spend a lot bandwidth here on this. However I am about to begin teaching an Elmer 101 QRP class for jr and sr high school kids this fall, and if anyone is aware of a source for information confirming that these sailors are in fact communicating by tapping CW it would be a helpful example in my efforts to motivate the students to study CW. Pointers to similar recent life saving events involving CW would also be of interest. Please respond off-list. Thanks!

- Tom Scott, eEngineering Manager, eBusiness Group

Wyle Electronics

10300 SW Nimbus Ave #PB
Portland, OR 97223

503-603-1931 - Tel
503-684-6620 - Fax
503-703-2032 -- Cell
KD7DMH
//_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_

Date: Wed, 16 Aug 2000 18:36:40 -0400
From: "Russ Hines" <radioruss@fuse.net>
To: <k5di@zianet.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [77516] Re: Heatsinking 101 Was Re: Engineering Problem
Message-ID: <00b001c007d2\$736b1ca0\$032044d8@rbhines>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Man, that's gotta hurt. :-)

For a stable heat source, find a Peltier device. Hot on one side, cool on other... for that finger you just burned. ;-)

73,
Russ
WB8ZCC

----- Original Message -----
From: Karl F. Larsen <k5di@zianet.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Sent: Wednesday, August 16, 2000 4:27 PM
Subject: Re: Heatsinking 101 Was Re: Engineering Problem

```
>
> Thanks for the data and I can't do it just now, no 20 watt 8 ohm resistor
> or good temp gauge. I will use transistors and just try it. If it burns my
> fingers I will un-key the rig.
>
> On Tue, 15 Aug 2000, Robert P. Okas wrote:
>
> > Hi Karl,
> >
> > If you're interested in an engineering solution, you need to
> > determine the thermal resistance of that 4 sq. in. hunk of alumimnum. To
> > do this, you'll need a reasonably accurate way to measure temperature.
```

An

> > indoor/outdoor digital thermometer, like that available from Radio Shack,
> > should be good enough. Use the remote outdoor sensor. You will also need a
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> >
> > Thermally bond the resistor to the chassis. You'll need the silicone
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in
> > a like manner. Note the starting temperature. Apply power to the
resistor
> > and let the temperature stabilize. This should take only a couple of
> > minutes due to the low thermal mass of the plate. Note the new
> > temperature.

End of QRP-L Digest 1915

